

REMARKS

Support for the Amendments

Support for the amendments to the claims is found throughout the specification, for example, at claims 1-37, as originally filed; page 6, lines 1-6; page 10, line 25 to page 11, line 32; page 18, lines 2-5; page 20, lines 10-13; page 24, line 22 to page 25, line 12; and page 38, line 29 to page 39, line 5. Applicant notes that the specification does not provide explicit support for the ranges recited in claims 171, 172, 195, 196, 220, 221, 231, and 232. It is Applicant's position, however, that these amendments are permissible under M.P.E.P. § 2163.05(III).

The Office Action

Claims 38-159 are pending. Claims 38, 80, 135, and 136 are objected to for various informalities. Claims 81, 96, 103, 105, and 159 stand rejected for indefiniteness.

Claims 38-159 stand rejected for obviousness over Manoharan et al. (U.S. Patent No. 6,576,752) in view of Singhvi et al. (U.S. Patent No. 6,368,838). For certain of the claims, Palsson et al. (U.S. Patent No. 5,811,274), Gudkov et al. (U.S. Patent No. 5,753,432), and Horlick et al. (U.S. Patent No. 5,976,807) were cited as providing elements not taught by Manoharan et al. or Singhvi et al.

Claims 38-159 have been cancelled without prejudice. New claims 160-236 have been added. New independent claim 160 is directed to an array of transfected cells having a specified density; new independent claims 178 and 227 are directed to an array

of nucleic acid molecules having a specified density and being non-covalently or reversibly affixed to a surface; and new independent claims 202 and 236 are directed to a method of forming an array of transfected cells by contacting cells with a surface having non-covalently or reversibly affixed nucleic acid molecules. These amendments were made to advance the claims towards allowance. Accordingly, the language objected to for informalities and rejected for indefiniteness is not recited in the newly added claims, and these objections and rejections are now moot. Moreover, the new limitations of the independent claims, as described above, overcome the cited combination of references.

Applicant further notes that the present obviousness rejection is based on the combination of five references, and that these references appear to have been combined based on hindsight analysis. To support an obviousness rejection, however, the Office must put forth a *prima facie* case that meets the legal standard for obviousness found in

~~M.P.E.P. § 2142.~~ This section states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991) (emphasis added).

This summary in the M.P.E.P. is based on Federal Circuit case law. For example, as stated by the Federal Circuit, "Both the suggestion and the expectation of success must

be founded in the prior art, not in the applicant's disclosure." *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988). As the Federal Circuit recently observed:

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Most if not all inventions arise from a combination of old elements. . . . Thus, every element of a claimed invention may often be found in the prior art. . . . However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. . . . Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab*, 217 F.3d 1365, 1369-70, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted) (emphasis added).

The evidence of a suggestion, teaching, or motivation to combine "must be clear and particular." *Dembiczak*, 175 F.3d at 999, 50 U.S.P.Q.2d at 1617. "Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness." *Monarch Knitting Mach. Corp. v. Sulzer Morat GMBH*, 139 F.3d 877, 881, 45 U.S.P.Q.2d 1977, 1981 (Fed. Cir. 1998). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" *Dembiczak*, 175 F.3d at 999, 50 U.S.P.Q.2d at 1617.

Thus, even if the Examiner identifies every element of a claimed invention in the prior art, this alone is insufficient to negate patentability. Otherwise, "rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention as a blueprint for piecing together elements in the prior art to

defeat the patentability of the claimed invention.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998). To avoid hindsight based on the invention to defeat patentability of the invention, the Federal Circuit requires an Examiner to show a motivation to combine the references that create the case of obviousness. *Id.* That is, “the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.” *Id.* (emphasis added).

Recently, in discussing the motivation to combine references the Federal Circuit noted that “[t]he factual inquiry [of] whether to combine references must be thorough and searching.” *In re Sang Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002), quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-1352, 60 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 2001). Furthermore, “the factual question of motivation [to combine references] is material to patentability, and ...[cannot] be resolved on subjective belief and unknown authority.” *Lee*, 277 F.3d at 1344, 61 U.S.P.Q.2d at 1434. Rather, the motivation to combine references “must be based on objective evidence of record.” *Lee*, 277 F.3d at 1343, 61 U.S.P.Q.2d at 1433. “This precedent has been reinforced in myriad decisions, and cannot be dispensed with.” *Id.*

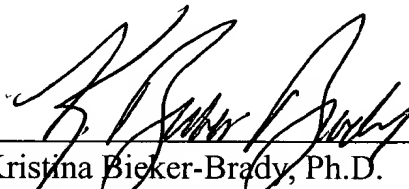
CONCLUSION

Applicant submits the claims are in condition for allowance, and such action is respectfully requested. If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

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